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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/524,870 | 02/11/2005 | Hironobu Ichimaru | Tsuruwaka 49 | 3006 |
| 23474 | 7590 | 08/15/2006 | | |
| FLYNN THIEL BOUTELL & TANIS, P.C. 2026 RAMBLING ROAD KALAMAZOO, MI 49008-1631 | | | EXAMINER MACKEY, JAMES P | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1722 | |
| DATE MAILED: 08/15/2006 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/524,870

Applicant(s)

ICHIMARU, HIRONOBU

Examiner

James Mackey

Art Unit

1722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,3 and 5 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1722

1. Claim 3 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 3 merely recites that one of the previously-recited structural elements of the claimed apparatus “has a green tire during the vulcanization of a green tire”; however, such relates only to the intended use of the claimed apparatus structure, which does not patentably distinguish apparatus claims and therefore does not further limit the subject matter of apparatus claim 2. Note that intended use has been continuously held not to be germane to determining the patentability of the apparatus, *In re Finsterwalder*, 168 USPQ 530; the manner or method in which a machine is to be utilized is not germane to the issue of patentability of the machine itself, *In re Casey*, 152 USPQ 235; purpose to which apparatus is to be put and expression relating apparatus to contents thereof during intended operation are not significant in determining patentability of an apparatus claim, *Ex parte Thibault*, 164 USPQ 666.

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 5 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Art Unit: 1722

The original disclosure does not adequately describe a tire vulcanizing apparatus “consisting essentially of” tire loading means, tire elevating means, lower mold, upper mold and movement means, as is now claimed in new claim 5. The original disclosure does not describe that the tire vulcanizing apparatus does not essentially consist of other structural elements, and such an explicit claim recitation cannot be supported by the mere lack of a disclosure of other structural elements, especially considering the schematic views of the drawings; note also that negative limitations in the claims must have explicit support in the specification to satisfy the description requirement of 35 USC 112, *In re Grasselli*, 231 USPQ 393. Moreover, the original disclosure explicitly describes that other structural elements are provided in the tire vulcanizing apparatus, for example, the bladder and center mechanism (page 7, lines 16-17), the post-cure inflator or PCI (page 8, line 1; page 9, line 1); and furthermore it is apparent that other structural elements are “essential” for the claimed tire vulcanizing apparatus, such as a heated pressurized fluid supply means for pressurizing the bladder and curing the green tire in the mold.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 2 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Japan 2000-158447.

Japan 2000-158447 teaches a tire vulcanizing apparatus (Figures 1, 3) comprising a tire loading means 2 which loads a green tire at a tire loading position X1 and moves the loaded green tire to a tire supplying position X2, a tire elevating means 7 which removes the green tire

Art Unit: 1722

from the tire loading means at the tire supplying position X2 and raises and lowers the green tire to set the received green tire into a lower mold 3 at the tire supplying position X2, and an upper mold 5 which lowers onto the lower mold at a tire vulcanizing position X3 so as to vulcanize and mold the green tire in cooperation with the lower mold and which raises the vulcanized tire from the lower mold at the tire vulcanizing position X3, wherein the lower mold and the tire loading means are integrally connected with each other so as to simultaneously move between the respective positions in a reciprocating manner by a movement means 11. The tire loading means 2 is capable of holding a green tire at any time (including during vulcanization), dependent only on the intended use of the claimed apparatus, which does not patentably distinguish the claimed apparatus structure. Note that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations, *Ex parte Masham*, 2 USPQ2d, 1647.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Art Unit: 1722

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 2000-158447.

Japan 2000-158447 discloses the tire vulcanizing apparatus substantially as claimed, as described above, except for the apparatus “consisting essentially of” the tire loading means, the tire elevating means, the lower mold, the upper mold and the tire movement means, since Japan ‘447 discloses that the apparatus includes a tire extractor 4 (see Figure 3, which does not include the PCI 6 shown in the Figure 1 embodiment) and a receiving conveyor 8. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Japan ‘447 by eliminating the tire extractor 4 and the receiving conveyor 8 from the Figure 3 embodiment, allowing manual removal of the vulcanized tire from the mold by an operator-held manual tool, and thereby providing the vulcanizing apparatus as consisting essentially of the tire loading means 2, the tire elevating means 7, the lower mold 3, the upper mold 5 and the moving means 11, especially considering that it has been held to be within the general level of skill in the art to omit an element and its function where not needed; see *Ex parte Rainu*, 168 USPQ 375, and *In re Kuhle*, 188 USPQ 7.

9. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record does not teach or fairly suggest a tire vulcanizing apparatus as claimed, wherein the tire loading means includes means for grasping and releasing a green tire. Japan 2000-158447, the closest prior art of record, discloses a tire loading means 2 as being a cradle which does not include tire grasping and releasing means, and the prior art of record does

Art Unit: 1722

not fairly suggest modifying such a cradle with tire grasping and releasing means, as claimed in claim 4.

10. Applicant's arguments filed 31 July 2006 have been fully considered but they are not persuasive.

Applicant argues that a tire supplying apparatus is required to supply a tire to the cradle 2 of Japan 2000-158447, making reference to the tire supplying apparatus 80 as shown in the Prior Art Figures 3A-3D of the instant application; however, Japan 2000-158447 does not show or require such a tire supplying apparatus (clearly, the green tire could be supplied by hand), and moreover, independent claim 2 does not preclude such additional structure.

Applicant argues that the prior art is utilized in a different method of operation; however, such relates only to the intended use of the claimed apparatus structure, which does not patentably distinguish the apparatus claims. See *In re Finsterwalder*, 168 USPQ 530; *In re Casey*, 152 USPQ 235; *Ex parte Thibault*, 164 USPQ 666.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

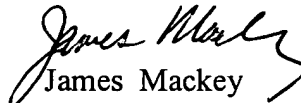
Art Unit: 1722

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Mackey whose telephone number is 571-272-1135. The examiner can normally be reached on M-F, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Yogendra Gupta can be reached on 571-272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


James Mackey
Primary Examiner
Art Unit 1722

8/11/06

jpm
August 11, 2006